

TRENDS IN THE BANKING SYSTEM OF THE WESTERN BALKAN COUNTRIES

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Abstract: *Financial development, as an inseparable part of economic development, entails the establishment and expansion of financial institutions, instruments, and markets. Developed financial infrastructure facilitates capital mobilization, helps in its efficient allocation, contributes to risk reduction, and facilitates the turnover of goods and services. Consequently, the development of the financial system acts as a catalyst for economic growth, raising living standards, reducing poverty, and enhancing societal economic well-being. Financial development is a dynamic process through which the financial system of a country evolves and transforms over time. In the countries of the Western Balkans, the first step towards financial development was the reform of the banking sector. The transformation of the banking sector was one of the most important aspects of the transition process from centrally planned to market economy. In this regard, the aim of this paper is to identify similarities and differences in financial development among Western Balkan countries through a comparative analysis and to highlight which segment of the financial system represents an obstacle to faster development in these countries. Generally accepted indicators of financial development, ensuring comparability across countries, include measures of size, activity, efficiency, and stability of the financial system.*

Key words: *financial development, banking sector, capital market, Western Balkans*

JEL classification: *G00, G21*

1. INTRODUCTION

The financial system occupies an important place in the modern economy thanks to its role of financial intermediation, i.e. channeling funds from surplus to deficit economic entities. A stable and efficient financial system encourages the mobilization of saving and allows it to be

allocated to the most productive projects, thereby encouraging innovation and economic growth. Also, without a financial system that functions well, it is impossible to ensure macroeconomic stability and potential for the development of a country.

In order to evaluate the level of development of the financial system as a whole and its component elements (financial institutions and the financial market), numerous indicators are used. Empirical studies are mainly based on standard quantitative indicators for the calculation of which data are available in appropriate national and international databases. Considering the complexity of the financial system, in practice it is very difficult to see all aspects of its functioning. Based on a certain number of indicators, analysts and researchers tend to see the appropriate dimensions and, mainly by comparative analysis of the performance of national financial systems in certain regions or countries with a similar level of GDP per capita, draw conclusions about the level of their relative financial development.

The subject of consideration in this paper is financial development in the countries of the Western Balkans. The Western Balkans is a term that has been used since the beginning of the XXI century. It includes the countries in the Balkans (Albania, Bosnia and Herzegovina, Macedonia, Serbia and Montenegro) that are on the way to European integration, and which in many respects share similar characteristics in the political and economic sense. According to the subject, the aim of this paper is to determine similarities and differences in the countries of the Western Balkans based on a comparative analysis of financial development and to indicate which segment of the financial system represents an obstacle to the faster development of these countries. Given that the financial systems in the observed countries are bank-centric, the

comparative analysis will be predominantly based on indicators of the development of the banking sector.

The paper is structured in the following way. After the introduction, the second part analyzes the indicators of the size and activities of the banking sector. The third part deals with the analysis of key indicators of the efficiency of the banking sector. In the fourth part, attention is paid to the analysis of financial stability. Finally, the fifth part of the paper contains concluding remarks.

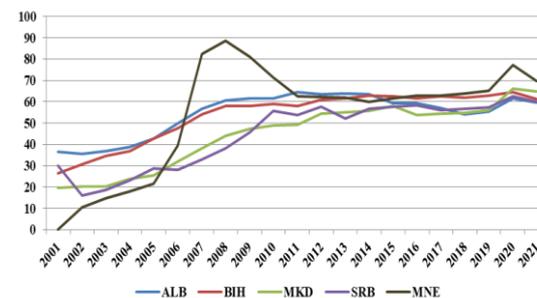
2. SIZE AND ACTIVITY OF THE FINANCIAL SYSTEM

The size of the financial system can be determined based on the value of financial assets, both in absolute terms and through a relative ratio to gross domestic product (GDP). While identifying the absolute amount of financial assets from a given perspective is only informative, the ratio of financial assets to GDP facilitates benchmarking of the state of financial development and enables comparison between countries at different stages of their development. Alternative indicators of the size of the banking sector, and at the same time the size of the financial system, involve the calculation of the share of monetary aggregates (M1, M2, M3) in GDP. The most common indicator in the empirical literature is the share of monetary aggregate M2 in GDP (Benhabib & Spiegel, 2000; Bordo & Rousseau, 2006; Puatwoe & Piabuo, 2017). However, Demetriades & Fielding (2012) They indicate that the increase in M2/GDP ratios in less developed countries is often a reflection of the growth of cash in circulation, rather than the increase in the volume of bank deposits. This reflects the degree of monetization in the economy rather than the development of financial intermediation by banks (Taivan & Nene, 2016). Therefore, for the sake of reliability of the obtained result, as an alternative indicator of the size of the banking sector, the share of bank liabilities based on deposits in GDP is used, which excludes cash in circulation from the wider money supply (M2).

Based on the data for the share of commercial banks' assets in GDP shown in Figure 1, it is evident that at the beginning of the observed period, the banking sector in Albania recorded the highest values in terms of size and that it maintained a fairly stable trend throughout the period. The banking sectors in Bosnia and Herzegovina, North Macedonia and Serbia followed the trend of the Albanian banking sector, while recording slightly lower values. In the Figure 1 the dynamics of the share of bank assets

in GDP in the case of Montenegro attracts special attention. At the beginning of the observed period, the Montenegrin banking sector had the lowest ratio of banks' assets/GDP, then in the years when the global crisis was the sharpest, this indicator recorded significantly higher values compared to other observed countries, and despite a significant decrease in the second half of the observed period, it remains at the highest level.

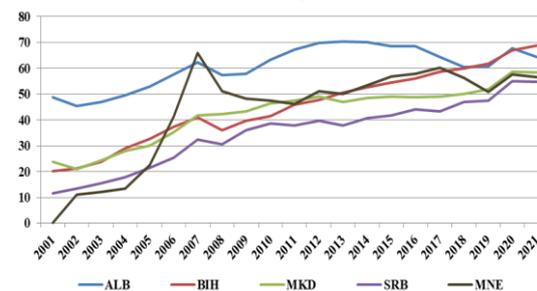
Figure 1. Assets of commercial banks (% of GDP)



Source: Author, on the basis of: World Bank (2024), World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>

Figure 2 shows the dynamics of the deposit base of banks in the analyzed countries. Based on the attached document, it can be seen that the highest values of racia deposits/GDP were recorded in Albania during the entire observed period, with the exception of 2007, when Montenegro recorded a slightly higher value. The deposit potential in North Macedonia, Bosnia and Herzegovina and Serbia recorded a stable, mostly growing trend, which is why Serbia has the lowest values of the share of deposits in GDP compared to other businesses.

Figure 2. Deposits in commercial banks (% of GDP)



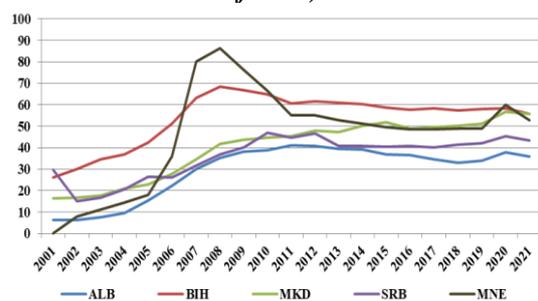
Source: Author, on the basis of: World Bank (2024), World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>

An indicator of the activity of the banking sector, which is otherwise very common in empirical studies, is the share of the amount of domestic bank loans granted to the private non-financial sector in GDP. Considering that the calculation of

this indicator does not take into account loans granted to the government, government agencies and public enterprises, as well as loans granted by the central bank, this indicator can be considered relevant from the aspect of the contribution of financial development to the growth of the real sector. The growth in the amount of domestic loans indicates not only a higher level of domestic investments, but also the development of the banking sector and the financial system. In economies where more loans are granted to the private sector, banks are more active in mobilizing savings, collecting information on debtors, exercising corporate control and risk management. In the early 2000s, foreign investment in banking, combined with an increased deposit base, strengthened loans to the private sector in the Western Balkans (Murgasova et al., 2015).

Figure 3 shows the dynamics of the share of private non-financial sector loans in GDP. During the period preceding the emergence of the global crisis, bank loans to the private sector in the observed countries recorded intense growth. Although the growth rate of loans to the private sector varied from country to country, the most dynamic was the growth of loans to households, especially housing loans. "The carriers of the accelerated loan growth were, dominantly, foreign banks." They took advantage of the large differences in interest rates on the domestic market and in EU countries and brought in large amounts of capital. Domestic savings, which banks primarily focus on, were not sufficient to finance the expansion of loan growth either in terms of volume or maturity structure, as it was dominated by demand deposits. The import of foreign savings was the primary source of renewal of credit activity in all observed countries. The expansion of the loan offer was financed mainly by the borrowing of banks from their parent companies abroad." (Živković, 2011, 63)

Figure 3. Loans granted to the private sector (% of GDP)



Source: Author, on the basis of: World Bank (2024), World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>

The growing trend in the credit market starting in 2009 was replaced by stagnation in the countries of the Western Balkans (Figure 3). Among other things, the tightening of credit standards and growing aversion to risk led to a decrease in the lending activity of banks. According to the share of bank loans granted to the private sector in GDP after more than ten years, that is, at the end of 2021, the observed countries were at the level of credit activity they had immediately before the global recession. The highest level of credit activity was achieved by Bosnia and Herzegovina and North Macedonia, followed by Montenegro and finally Serbia and Albania.

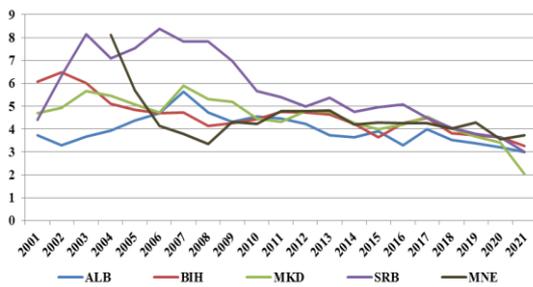
2. EFFICIENCY OF THE FINANCIAL SYSTEM

The sustainable development of the financial system and the extent to which it supports the activities of the real sector depend to a large extent on the efficiency with which intermediation takes place. Efficiency refers to the ability of the financial sector to provide high quality products and services at the lowest cost. Quantitative measures of efficiency that could be evaluated include: the ratio of approved loans to the private sector and deposits of commercial banks, net interest margin and operating expenses. The approved loans/deposits ratio shows the percentage of savings that has been transferred to private sector loans. At the same time, it should be borne in mind that deposits, as a rule, are not the only source of credit potential of banks and that loans are not the only asset in which banks invest.

Another efficiency indicator is the net interest margin, which represents the ratio of the bookkeeping value of net banking income from interest to the total assets of banks.

Figure 4 shows that at the beginning of the observed period, the highest value of the net interest margin was recorded in Bosnia and Herzegovina, while the lowest value was recorded in Albania. If the values of the net interest margin are averaged over the observed period, it is evident that it is a decreasing trend, which is certainly desirable in this case. During the observed period, the greatest increase in efficiency, which is reflected in the reduction of the net interest margin, occurred in Serbia and Montenegro. Also, in Figure 4, it can be seen that at the end of the observed period, in terms of interest margin, the banking sector is the most efficient in North Macedonia.

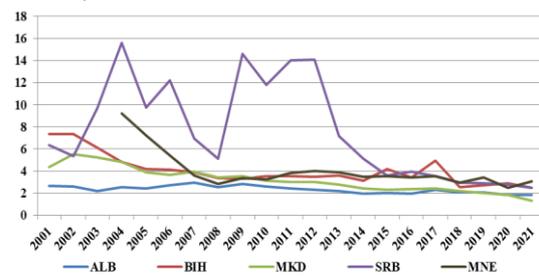
Figure 4. Tendency of movement of the net interest margin (%)



Source: Author, on the basis of: World Bank (2024), World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>

The next indicator represents the operating costs or the bank's operating costs, which refer to the share of the bookkeeping value of the bank's operating costs in total assets. This ratio is not affected by changes in interest rates and provides a more objective picture of the bank's efficiency in terms of how it manages its expenses compared to its assets. Therefore, this ratio helps to measure the efficiency of a bank or other financial institution at times when there are significant changes in interest rates or interest differences (Blatter & Fuster, 2022). Lower values of operating expenses, as in the case of net interest margin, indicate a higher level of banking efficiency. A higher level of assets is desirable, but not a higher level of operating expenses. Thus, a bank that regularly achieves a lower ratio of operating expenses to assets is better in terms of operational efficiency.

Figure 5. Dynamics of operating costs (% of total assets)



Source: Author, on the basis of: World Bank (2024), World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>

Figure 5 shows the ratio of operating expenses to total assets of banking sectors in the countries of the Western Balkans. During the observed period, Albania, North Macedonia and Bosnia and Herzegovina recorded a slightly decreasing trend, i.e. an improvement in efficiency, while in the case of Serbia, during the first half and middle of

the period, a certain cyclical nature of the observed ratio was observed, after which it came to a significant decrease, i.e. to the increase in the efficiency of banks. When it comes to Montenegro, in the first half of the observed period, there is a significant improvement in the operational efficiency of the banking sector, and during the second half of the given period, it does not deviate significantly in relation to other observed countries.

3. STABILITY OF THE FINANCIAL SYSTEM

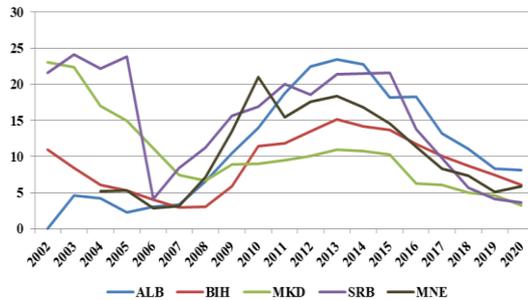
The relevance of financial stability analysis was first recognized at the time of the international financial crises at the end of the 90s of the last century, while it was further strengthened by the financial crisis that occurred in 2007. The magnitude itself and globality of its destabilizing effect, achieved through global banking, makes it the single most disruptive economic event since the Great Depression of the late 1920s/early 1930s (Gundbert, 2012).

The period of accelerated credit growth that preceded the global recession in 2007 was marked, among other things, by the underestimation of credit risk that arises as a result of the expansion of the client base and overestimation of their creditworthiness. (Živković, 2011). As shown in Figure 6, the problem of non-performing loans in the countries of the Western Balkans existed before the crisis. The specificity that can be seen in the picture is that at the beginning of the observed period, Serbia and North Macedonia had the largest share of non-performing loans in total loans compared to other countries. The causes of the growth of non-performing loans in Serbia are to a large extent found in the problems that existed in the pre-crisis period, which are probably related to institutional factors and the strong credit expansion that existed in that period (Tanasković & Jandrić, 2014).

Right before the beginning of the crisis, the rehabilitation of the banks' non-collectible claims took place (the share of non-collectible loans in all observed countries was below 10% in 2007 (Figure 6)). However, in the following year, the re-growth of non-performing loans begins and continues until 2013. After a short period of stagnation, this indicator of asset quality in the countries of the Western Balkans begins to decline from 2015, which lasts until the end of the observed period (with the exception of Montenegro, which records an increase in non-performing loans in 2021). The downward trend of non-performing loans is mainly the result of

systemic measures taken by central banks and other relevant institutions involved in solving the problem of non-performing loans.

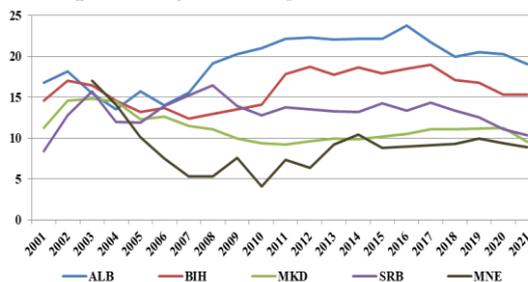
Figure 6. Non-performing loans (% of total loans)



Source: Author, on the basis of: World Bank (2024), World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>

One of the important indicators that reflects the degree of stability of banks is the z-score (Pham, Dao & Nguyen 2023; Hafeez, Li, Kabir & Tripe, 2022; Bouvatier, Lepetit, Rehault & Strobel, 2021). The popularity of the z-score stems from the fact that it is negatively correlated with the probability of insolvency of a financial institution, that is, the probability that the value of its assets will be lower than the value of its debt. Thus, a higher z-score value implies a lower probability of insolvency (Čihák et al., 2013). In some cases, the objectivity of this indicator is disputed since it is based on purely accounting data and there is a possibility that it may provide an unrealistically positive assessment of the stability of the banking sector.

Figure 7. Dynamics of z-score indicator



Source: Author, on the basis of: World Bank (2024), World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>

Observing the values of the z-score indicator for the banking sectors of the Western Balkan countries, shown in Figure 7, it can be noted that the probability of solvency increased immediately before the 2007 crisis, and that after that there was

an improvement in solvency. Also, it is noticeable that during the observed period, and especially in its second half, the highest degree of solvency, i.e. stability, was recorded by the banking sector in Albania, followed by Bosnia and Herzegovina and Serbia. North Macedonia and Montenegro remained at the bottom of the list.

3.1. CONCLUSION

The paper analyzes financial development indicators on the example of a group of five Western Balkan countries. For the purposes of the analysis, secondary data taken from the World Bank database for the period 2001–2021 were used.

Based on the dynamics of the considered indicators, first of all, their cyclical movement is observed, which is in accordance with the characteristics of reality and the dynamics of the overall economic activity in the observed period. In addition, it is not possible to single out a country that leads the way in all dimensions of financial development. What can be noted is that at the end compared to the beginning of the observed period, there was a significant growth in the size and activity of the banking sector, a slight improvement in efficiency and maintenance of financial stability in all five countries of the Western Balkans.

In order for the performance of the financial system to be comprehensive, it is necessary to analyze the indicators of the development of the capital market. Such an analysis was not feasible this time, given that there are no available comparable indicators of the development of the capital market in the countries of the Western Balkans in the World Bank database. Historically observed, the capital market, both in Serbia and in other Western Balkan countries, did not play a significant role in the financing of economic activity. Among other things, the socio-political order and the lack of an adequate institutional framework were the limiting factors of its development. The share markets in these countries are mostly small and illiquid, and therefore fall into the category of so-called marginal markets. In this regard, the development of the securities market is one of the necessary conditions that would improve the overall financial and economic development of the Western Balkans countries.

As for future research, the focus will remain on monitoring further trends in the size, activity, efficiency and stability of financial systems in the countries of the Western Balkans. One of the reasons is the fact that the continuation of the observed period was followed by the crisis caused by the COVID-19 pandemic and, in connection

with that, the need to consider its impact on financial development.

REFERENCES

- [1] Benhabib, J., and Spiegel, M., (2000): The Role of Financial Development in Growth and Investment. *Journal of Economic Growth*, 5(4), 341-360.
- [2] Blatter, M. and Fuster, A., (2022): Scale effects on efficiency and profitability in the Swiss banking sector“, *Swiss Journal Economics Statistics* 158, 12.
- [3] Bordo, M. D. and Rousseau, P. L., (2006): Legal-Political Factors and the Historical Evolution of the Finance-Growth Link. Working Paper No. 12035. National Bureau of Economic Research.
- [4] Bouvatier, V., Lepetit, L., Rehault, P.N. and Strobel, F., (2023): Time-varying Z-score measures for bank insolvency risk: Best practice, *Journal of Empirical Finance*, Volume 73, 170-179.
- [5] Čihák, M., Demirgüç-Kunt, A., Feyen, E. and Levine, R., (2013): Financial Development in 205 Economies, 1960 to 2010, *Journal of Financial Perspectives*, 1(2). 17-36.
- [6] Demetriades, P. and Fielding, D., (2012): Information, institutions, and banking sector development in West Africa. *Economic Inquiry*, 50(3), 739-753.
- [7] Gundbert, S., (2012): Financial Stability Policy in the Euro Zone – The Political Economy of National Banking Regulation in an Integrating Monetary Union. Springer Gabler.
- [8] Hafeez, B., Li, X., Kabir, H. and Tripe, D., (2022): Measuring bank risk: Forward-looking z-score, *International Review of Financial Analysis*, Volume 80.
- [9] Murgasova, Z., Ilahi N., Miniane, J., Scott, A. and Vladkova-Hollar, I., (2015): Zapadni Balkan: 15 godina ekonomske trnazičije – Posebno izvješće o regionalnim ekonomskim pitanjima, Međunarodni monetarni fond, preuzeto sa: https://www.imf.org/external/pubs/ft/reo/2015/eur/eng/pdf/erei_sr_030915_Croatian.pdf., pristupljeno: 23. Mart 2024.
- [10] Pham, T.T., Dao, L.K., & Nguyen, V.C. (2021). The determinants of bank's stability: A system GMM panel analysis, *Cogent Business & Management*, 8(1), 1-18.
- [11] Puatwoe, J.T., Piabuo, S.M. (2017). Financial sector development and economic growth: evidence from Cameroon. *Financ Innov* 3, 25.
- [12] Taivan, A. and Nene, G., (2016): Financial development and economic growth: evidence from southern african development community countries. *The Journal of Developing Areas*, 50(4), 81–95.
- [13] Tanasković, S. and Jandrić, M., (2014): Problematični krediti: determinante rasta i moguća rešenja. *Kvartalni monitor*, br. 39, 75-84.
- [14] World Bank (2024): World Development Indicators Database, <https://databank.worldbank.org/source/global-financial-development>
- [15] Živković, B. (2011): Komparativna analiza bankarskog sistema Srbije i zemalja Jugoistočne Evrope. *Kvartalni monitor*, 27, 62-72.